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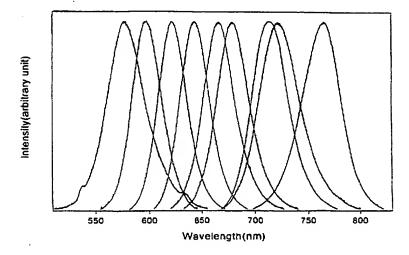
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(54) Title: TELLURIUM-CONTAINING NANOCRYSTALLINE MATERIALS



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(57) Abstract: Tellurium-containing nanocrystallites are produced by injection of a precursor into a hot coordinating solvent, followed by controlled growth and annealing. Nanocrystallites may include CdTe, ZnTe, MgTe, HgTe, or alloys thereof. The nanocrystallites can photoluminesce with quantum efficiencies as high as 70 %.